



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

Marc Blondel et al.

Application No.: 10/531,594

Filing Date: November 28, 2005

Title: SCREENING MOLECULES WITH  
ANTI-PRION ACTIVITY: KITS,  
METHODS AND SCREENED  
MOLECULES

Group Art Unit: 1700

Examiner: Unassigned

Confirmation No.: 1460

## TRANSMITTAL LETTER

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Enclosed is a second submission of a Letter Regarding Correction of the Filing Date with supporting documentation for the above-identified patent application.

- ☐ A Petition for Extension of Time is enclosed.
- ☐ \_\_\_\_\_ Terminal Disclaimer(s) and the ☐ \$ 65 ☐ \$ 130 fee per Disclaimer due under 37 C.F.R. § 1.20(d) are enclosed.
- ☐ Also enclosed is/are:
- ☐ Small entity status is hereby claimed.
- ☐ Applicant(s) requests continued examination under 37 C.F.R. § 1.114 and enclose the ☐ \$ 395 ☐ \$ 790 fee due under 37 C.F.R. § 1.17(e).
- ☐ Applicant(s) requests that any previously unentered after final amendments not be entered. Continued examination is requested based on the enclosed documents identified above.
- ☐ Applicant(s) previously submitted \_\_\_\_\_ on \_\_\_\_\_ for which continued examination is requested.
- ☐ Applicant(s) requests suspension of action by the Office until at least \_\_\_\_\_, which does not exceed three months from the filing of this RCE, in accordance with 37 C.F.R. § 1.103(c). The required fee under 37 C.F.R. § 1.17(i) is enclosed.
- ☐ A Request for Entry and Consideration of Submission under 37 C.F.R. § 1.129(a) (1809/2809) is also enclosed.

- ☒ No additional claim fee is required.
- ☐ An additional claim fee is required, and is calculated as shown below:

| AMENDED CLAIMS   |               |   |              |                 |                |
|--|---------------|---|--------------|-----------------|----------------|
|  | No. of Claims | Highest No. of Claims Previously Paid For | Extra Claims | Rate            | Additional Fee |
| Total Claims   | 17            | 20  | 0            | x \$ 50 (1202)  | \$ 0           |
| Independent Claims   | 7             | 9   | 0            | x \$ 200 (1201) | 0              |
| <input type="checkbox"/> If Amendment adds multiple dependent claims, add \$ 360 (1203)          |               |   |              |                 | \$ 0           |
| <b>Total Claim Amendment Fee</b>   |               |   |              |                 | <b>\$ 0</b>    |
| <input type="checkbox"/> Small Entity Status claimed - subtract 50% of Total Claim Amendment Fee |               |   |              |                 | 0              |
| <b>TOTAL ADDITIONAL CLAIM FEE DUE FOR THIS AMENDMENT</b>   |               |   |              |                 | <b>\$ 0</b>    |

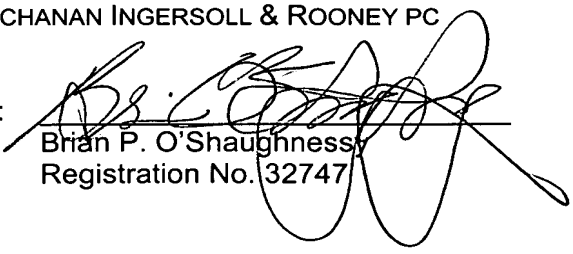
- ☐ Charge \_\_\_\_\_ to Deposit Account No. 02-4800 for the fee due.
- ☐ A check in the amount of \_\_\_\_\_ is enclosed for the fee due.
- ☐ Charge \_\_\_\_\_ to credit card for the fee due. Form PTO-2038 is attached.
- ☒ The Director is hereby authorized to charge any appropriate fees under 37 C.F.R. §§ 1.16, 1.17 and 1.20(d) and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 02-4800. This paper is submitted in duplicate.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date September 14, 2006

By:

  
Brian P. O'Shaughnessy  
Registration No. 32747

P.O. Box 1404  
Alexandria, VA 22313-1404  
703 836 6620



UNITED STATES PATENT AND TRADEMARK OFFICE

1032475-0000357  
 UNITED STATES DEPARTMENT OF COMMERCE  
 United States Patent and Trademark Office  
 Address: COMMISSIONER FOR PATENTS  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
 www.uspto.gov

|                             |                       |                  |
|-----------------------------|-----------------------|------------------|
| U.S. APPLICATION NUMBER NO. | FIRST NAMED APPLICANT | ATTY. DOCKET NO. |
| 10/531,594                  | Marc Blondel          | 032475-035       |

|                               |               |
|-------------------------------|---------------|
| INTERNATIONAL APPLICATION NO. |               |
| PCT/FR03/03101                |               |
| I.A. FILING DATE              | PRIORITY DATE |
| 10/20/2003                    | 10/18/2002    |

21839  
 BUCHANAN INGERSOLL PC  
 (INCLUDING BURNS, DOANE, SWECKER & MATHIS)  
 POST OFFICE BOX 1404  
 ALEXANDRIA, VA 22313-1404

CONFIRMATION NO. 1460

371 ACCEPTANCE LETTER



\*OC000000018513288\*

Date Mailed: 04/13/2006

**NOTICE OF ACCEPTANCE OF APPLICATION UNDER 35 U.S.C 371 AND 37 CFR 1.495**

The applicant is hereby advised that the United States Patent and Trademark Office in its capacity as a Designated / Elected Office (37 CFR 1.495), has determined that the above identified international application has met the requirements of 35 U.S.C. 371, and is ACCEPTED for national patentability examination in the United States Patent and Trademark Office.

The United States Application Number assigned to the application is shown above and the relevant dates are:

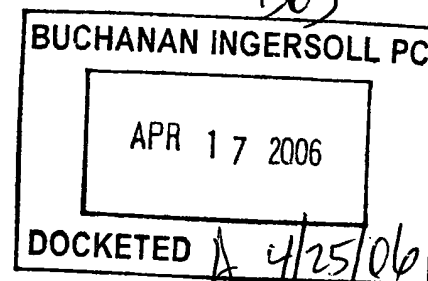
|  |  |
|--|--|
| <u>28</u><br>11/20/2005  | 11/28/2005   |
| DATE OF RECEIPT OF 35 U.S.C. 371(c)(1), (c)(2) and (c)(4) REQUIREMENTS | DATE OF COMPLETION OF ALL 35 U.S.C. 371 REQUIREMENTS |

A Filing Receipt (PTO-103X) will be issued for the present application in due course. **THE DATE APPEARING ON THE FILING RECEIPT AS THE " FILING DATE" IS THE DATE ON WHICH THE LAST OF THE 35 U.S.C. 371 (c)(1), (c)(2) and (c)(4) REQUIREMENTS HAS BEEN RECEIVED IN THE OFFICE. THIS DATE IS SHOWN ABOVE.** The filing date of the above identified application is the international filing date of the international application (Article 11(3) and 35 U.S.C. 363). Once the Filing Receipt has been received, send all correspondence to the Group Art Unit designated thereon.

The following items have been received:

- Copy of the International Application filed on 04/18/2005
- English Translation of the IA filed on 11/20/2005
- Preliminary Amendments filed on 04/18/2005
- Information Disclosure Statements filed on 04/18/2005
- Biochemical Sequence Diskette filed on 11/20/2005
- Oath or Declaration filed on 11/20/2005
- Biochemical Sequence Listing filed on 04/18/2005
- U.S. Basic National Fees filed on 04/18/2005
- Priority Documents filed on 04/18/2005

The following defects have been observed:



SUMMARY OF FEES DUE:

Total additional fee(s) for this application is \$-10 for a large entity.

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Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

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SHELBY J VIGIL

Telephone: (703) 308-9140 EXT 224

PART 1 - ATTORNEY/APPLICANT COPY

FORM PCT/DO/EO/903 (371 Acceptance Notice)

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Attorney's Docket No. 1032475-000035

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of

Marc Blondel et al.

Application No.: 10/531,594

Filed: November 28, 2005

For: SCREENING MOLECULES WITH  
ANTI-PRION ACTIVITY: KITS,  
METHODS AND SCREENED  
MOLECULES

)  
)  
) Group Art Unit: 1655

)  
) Examiner: Unassigned

)  
) Confirmation No.: 1460

**SECOND SUBMISSION OF**

**LETTER REGARDING CORRECTION OF THE FILING DATE**

Commissioner for Patents  
Office of Initial Patent Examination  
Customer Service Center  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

A copy of the Official Filing Receipt marked in red is enclosed to indicate what needs to be corrected. The correction should be made as follows:

In the Filing or 371(c) Date, please delete "11/20/2005" and insert --11/28/2005--.

For the convenience of the U.S. Patent and Trademark Office, a copy of the Notice of Acceptance of Application is also enclosed. The date of completion of all 35 U.S.C. 371 Requirements is correctly shown as 11/28/2005. However, the date of receipt of the 35 U.S.C. 371(c)(1), (c)(2) and (c)(4) requirements is incorrectly entered.

A copy of the Image File Wrapper contents obtained from PAIR that correctly indicates the 11/28/2005 submission date, and a copy of the first page of the specification that indicates the PCT/PTO received stamp date of 28 Nov 2005 are included.

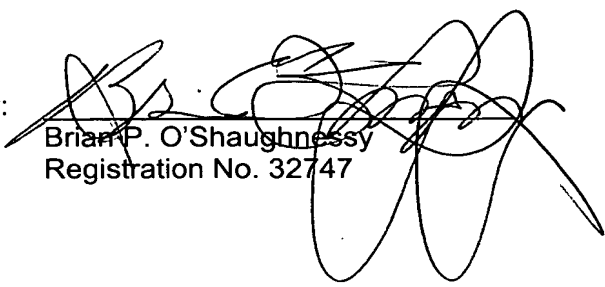
It is respectfully requested that the U.S. Patent and Trademark Office records be updated to reflect the 11/28/2005 date.

Respectfully submitted,

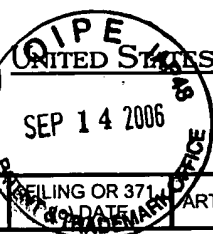
BUCHANAN INGERSOLL & ROONEY PC

Date: September 14, 2006

By:

  
Brian P. O'Shaughnessy  
Registration No. 32747

P.O. Box 1404  
Alexandria, VA 22313-1404  
703 836 6620



UNITED STATES PATENT AND TRADEMARK OFFICE

1032475-000035

UNITED STATES DEPARTMENT OF COMMERCE  
 United States Patent and Trademark Office  
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| APPL NO.   | FILING OR 371 DATE | PART UNIT | FIL FEE REC'D | ATTY DOCKET NO | DRAWINGS | TOT CLMS | IND CLMS |
|------------|--------------------|-----------|---------------|----------------|----------|----------|----------|
| 10/531,594 | 11/20/2005         | 1655      | 2830          | 032475-035     | 6        | 15       | 9        |

28

21839

BUCHANAN, INGERSOLL & ROONEY PC  
 POST OFFICE BOX 1404  
 ALEXANDRIA, VA 22313-1404

CONFIRMATION NO. 1460

CORRECTED FILING RECEIPT



\*OC00000020106398\*

Date Mailed: 08/18/2006

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

## Applicant(s)

Marc Blondel, Saint-Pol de leon, FRANCE;  
 Christophe Cullin, Merignac, FRANCE;  
 Jean Michel Vierfond, Maisons Alfort, FRANCE;  
 Stephane Bach, Saint-Pol de leon, FRANCE;  
 Nicolas Talarek, Telence, FRANCE;  
 Yvette Mettey, Poitiers, FRANCE;

Power of Attorney: The patent practitioners associated with Customer Number 21839.

## Domestic Priority data as claimed by applicant

This application is a 371 of PCT/FR03/03101 10/20/2003

## Foreign Applications

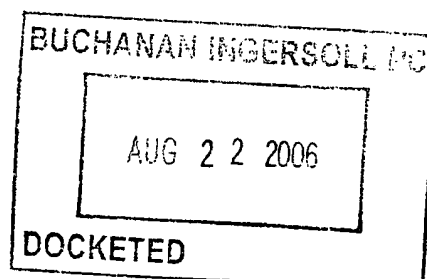
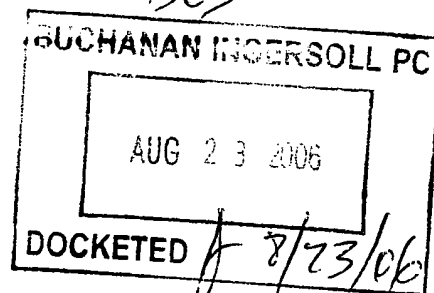
FRANCE 0213022 10/18/2002  
 FRANCE 03/08289 07/07/2003

If Required, Foreign Filing License Granted: 08/18/2006

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US10/531,594**

Projected Publication Date: Not Applicable

Non-Publication Request: No





Screening molecules with anti-prion activity: kits, methods and screened molecules

## Preliminary Class

435

## PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

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### LICENSE FOR FOREIGN FILING UNDER Title 35, United States Code, Section 184 Title 37, Code of Federal Regulations, 5.11 & 5.15

#### **GRANTED**

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted



under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

#### **NOT GRANTED**

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

**This application is officially maintained in electronic form. To View: Click the desired Document Description. To Download and Print: Check the desired document(s) and click Start Download.**

#### **Available Documents**

| <b>Mail Room Date</b> | <b>Document Description</b>                      | <b>Document Category</b> | <b>Page Count</b> |
|-----------------------|--|--------------------------|-------------------|
| 06-01-2006            | CRF entered - partial listing printed by STIC    | PROSECUTION              | 11                |
| 05-03-2006            | Request for Corrected Filing Receipt             | PROSECUTION              | 4                 |
| 04-13-2006            | Notice of DO/EO Acceptance Mailed                | PROSECUTION              | 2                 |
| 12-21-2005            | Miscellaneous Incoming Letter                    | PROSECUTION              | 2                 |
| 12-21-2005            | Miscellaneous Incoming Letter                    | PROSECUTION              | 5                 |
| 12-21-2005            | Sequence Listing                                 | PROSECUTION              | 3                 |
| 12-21-2005            | Extension of Time                                | PROSECUTION              | 1                 |
| 11-28-2005            | Miscellaneous Incoming Letter                    | PROSECUTION              | 4                 |
| 11-28-2005            | Specification                                    | PROSECUTION              | 32                |
| 11-28-2005            | Claims   | PROSECUTION              | 6                 |
| 11-28-2005            | Drawings   | PROSECUTION              | 6                 |
| 11-28-2005            | Oath or Declaration filed                        | PROSECUTION              | 3                 |
| 11-20-2005            | Bibliographic Data Sheet                         | PROSECUTION              | 1                 |
| 10-03-2005            | Information Disclosure Statement (IDS) Filed     | PROSECUTION              | 3                 |
| 10-03-2005            | NPL Documents                                    | PROSECUTION              | 23                |
| 10-03-2005            | NPL Documents                                    | PROSECUTION              | 6                 |
| 10-03-2005            | NPL Documents                                    | PROSECUTION              | 3                 |
| 10-03-2005            | NPL Documents                                    | PROSECUTION              | 2                 |
| 09-28-2005            | Notice of DO/EO Missing Requirements Mailed      | PROSECUTION              | 2                 |
| 04-18-2005            | Transmittal letter                               | PROSECUTION              | 2                 |
| 04-18-2005            | Incoming Specification - Not in English          | PROSECUTION              | 37                |
| 04-18-2005            | Abstract   | PROSECUTION              | 1                 |
| 04-18-2005            | Drawings   | PROSECUTION              | 6                 |
| 04-18-2005            | Claims Worksheet (PTO-2022)                      | PROSECUTION              | 1                 |
| 04-18-2005            | Fee Worksheet (PTO-875)                          | PROSECUTION              | 1                 |
| 04-18-2005            | Fee Worksheet (PTO-875)                          | PROSECUTION              | 1                 |
| 04-18-2005            | Preliminary Amendment                            | PROSECUTION              | 1                 |
| 04-18-2005            | Specification                                    | PROSECUTION              | 1                 |
| 04-18-2005            | Applicant Arguments/Remarks Made in an Amendment | PROSECUTION              | 1                 |
| 04-18-2005            | Information Disclosure Statement (IDS) Filed     | PROSECUTION              | 2                 |
| 04-18-2005            | Foreign Priority Papers Filed                    | PROSECUTION              | 45                |
| 04-18-2005            | Foreign Priority Papers Filed                    | PROSECUTION              | 48                |
| 04-18-2005            | Miscellaneous Internal Document                  | PROSECUTION              | 1                 |
| 04-18-2005            | Sequence Listing                                 | PROSECUTION              | 2                 |
| 04-18-2005            | Documents submitted with 371 Applications        | PROSECUTION              | 8                 |
| 04-18-2005            | Documents submitted with 371 Applications        | PROSECUTION              | 57                |
| 04-18-2005            | Documents submitted with 371 Applications        | PROSECUTION              | 5                 |

**Close Window**

Screening molecules with anti-prion activity: kits,  
methods and screened molecules.

The present invention relates to screening of molecules  
 5 with anti-prion activity. It relates more particularly to  
 kits for screening molecules with anti-prion activity,  
 methods of screening, and a family of molecules with  
 anti-prion activity revealed using the screen according  
 to the invention.

10 Prions are infectious proteins responsible for certain  
 neuro-degenerative diseases of spongiform encephalopathy  
 type in mammals, such as Creutzfeldt-Jakob's disease in  
 humans or also the so-called "mad cow disease" in bovines  
 15 or "scrapie" in ovines. These different diseases are  
 caused by unconventional infectious agents: unlike  
 traditional infectious agents (bacteria, viruses for  
 example), they contain no nucleic acids. Professor  
 Stanley Prusiner formulated the "protein-only" hypothesis,  
 20 according to which the infectious agent would be  
 constituted only by a protein. This protein exists  
 naturally in cells in a normal (or  $\text{PrP}^c$ ) form, i.e.

soluble, essentially in the form of an  $\alpha$  helix and non-  
 aggregated, therefore functional. Under certain still  
 25 unknown conditions, this protein can be converted to a  
 prion (or  $\text{PrP}^{\text{sc}}$ ) form. In this prion form, the protein  
 forms insoluble aggregates, essentially in the form of  $\beta$   
 sheets. The infectious character of this  $\text{PrP}^{\text{sc}}$  prion  
 conformation would result from the fact that, apart from  
 30 the characteristics indicated previously, the protein in  
 prion form also gains the ability to catalyze the passage  
 from the normal  $\text{PrP}^c$  cell form to the  $\text{PrP}^{\text{sc}}$  prion form in  
 a "snowball"-type mechanism.